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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,174	11/29/2004	Michael Haubmann	53595/DBP/M521	6577

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EXAMINER

FULLER, RODNEY EVAN

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/510,174

Applicant(s)

HAUBMANN, MICHAEL

Examiner

Rodney E. Fuller

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Rodney Fuller
Primary Examiner

R. J. Fuller

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/4/04; 4/25/05.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because 1) the abstract exceed 150-words and 2) the phrase "The invention relates to..." can be implied. Correction is required. See MPEP § 608.01(b).

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following item(s) must be shown or the feature(s) canceled from the claim(s):

- a. (Claim 1): "a computer"
- b. (Claim 6): "control electronics"
- c. (Claim 7): "a CAN bus system"
- d. (Claim 15): "a computer" and "the picture recording"

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 10, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by MacRae et al. (US 4,483,599).

Regarding claims 1 and 15, MacRae discloses "a signaling device (Fig. 1, ref.# 4) for generating an optical synchronization signal (column 1, line 39), wherein the optical synchronization signal of the synchronization device can be initiated by means of a computer (Fig. 1, ref.# 1) controlling the picture recording and wherein the signaling device has a number of optical signaling elements (column 2, lines 5-9) for generating optical synchronization signals."

Regarding claim 2, MacRae discloses "wherein the optical signaling elements of the signaling device are arranged in the form of a digital display for symbols (column 2, lines 5-9)."

Regarding claim 3, MacRae discloses "wherein the optical signaling elements of the signaling device are arranged in the form of a matrix (Fig. 1, ref.# 4; column 2, lines 5-9)."

Regarding claim 4, MacRae discloses "wherein the optical signaling elements are formed as light-emitting lighting elements (column 2, lines 4-9)."

Regarding claim 5, MacRae discloses "wherein the signaling device (Fig. 1, ref.# 4) is mounted in a housing, wherein the optical signaling elements are visible on at least one surface of the housing (Fig. 1, ref.# 4)."

Regarding claim 6, MacRae discloses "wherein the housing comprises control electronics of the signaling device and a control interface for connection to the computer (Fig. 1 shows the connection path between the signaling device 4 and the computer 1)."

Regarding claim 10, MacRae discloses "wherein the synchronization device (Fig. 1, ref.# 4) has an interface for connection of a light device (Fig. 1, ref.# 13) for the projection of an optical synchronisation signal."

Regarding claim 11, MacRae discloses "wherein the symbols are selected from the group of signals consisting of letters and numbers (column 2, lines, 2, 4-5)."

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacRae et al. (US 4,483,599) in view of the admitted prior art (Specification, page 4, lines 13-14).

MacRae discloses all the structure set forth in the claims except "wherein the control interface can be connected to a CAN bus system." The admitted prior art (Specification, page 4, lines 13-14) sets forth that a CAN bus system is typical for motion-control systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify MacRae by including a CAN bus system to connect to the control interface. The ordinary artisan would have been motivated to modify MacRae in the manner described above to reduce cost and to be compatible with existing motion control systems

8. Claims 8, 9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacRae et al. (US 4,483,599) in view of Kanazawa, et al. (US 7,042,537)

MacRae discloses wherein the signaling device comprises a liquid crystal display. However, MacRae does not disclose (claims 8, 9 and 12) "wherein the optical signaling elements comprise light-emitting diodes, " (claims 9, 13 and 14) "wherein the light-emitting diodes provide for color mixing." Kanazawa teaches that a LED display device can be used in place of a LCD display. Further, Kanazawa discloses wherein the display provides for color mixing. (See Kanazawa, column 7, lines 24 and 26-41) Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify MacRae by using light emitting diodes (LEDs) in place of the liquid crystal display (LCD) and to have the LEDs provide color mixing. The ordinary artisan would have been motivated to modify MacRae in the manner described above to decrease observable color blur and improve the picture quality of the display as taught by Kanazawa in column 7, lines 39-41.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Davies (US 6,831,729), Berardi (US 5,457,507) and Bauer (US 6,621,552) each disclose a synchronization device.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rodney E Fuller
Primary Examiner
Art Unit 2851



September 6, 2006